

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: EPHESUS

Report Number: P574890

Luminaire Tested: **EPH-VN-04-735-U-5MQ**

Issue Date: 10/19/2021



**Test Information**

Test Method: LM-79-08  
Report Number: P574890  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 10/19/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: EPHEBUS  
Catalog Number: EPH-VN-04-735-U-5MQ  
Description: EPHEBUS LUMAVISION – Middle Tier Light Square Luminaire w/ 5MQ distribution lens  
Light Source: (64) 3500K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

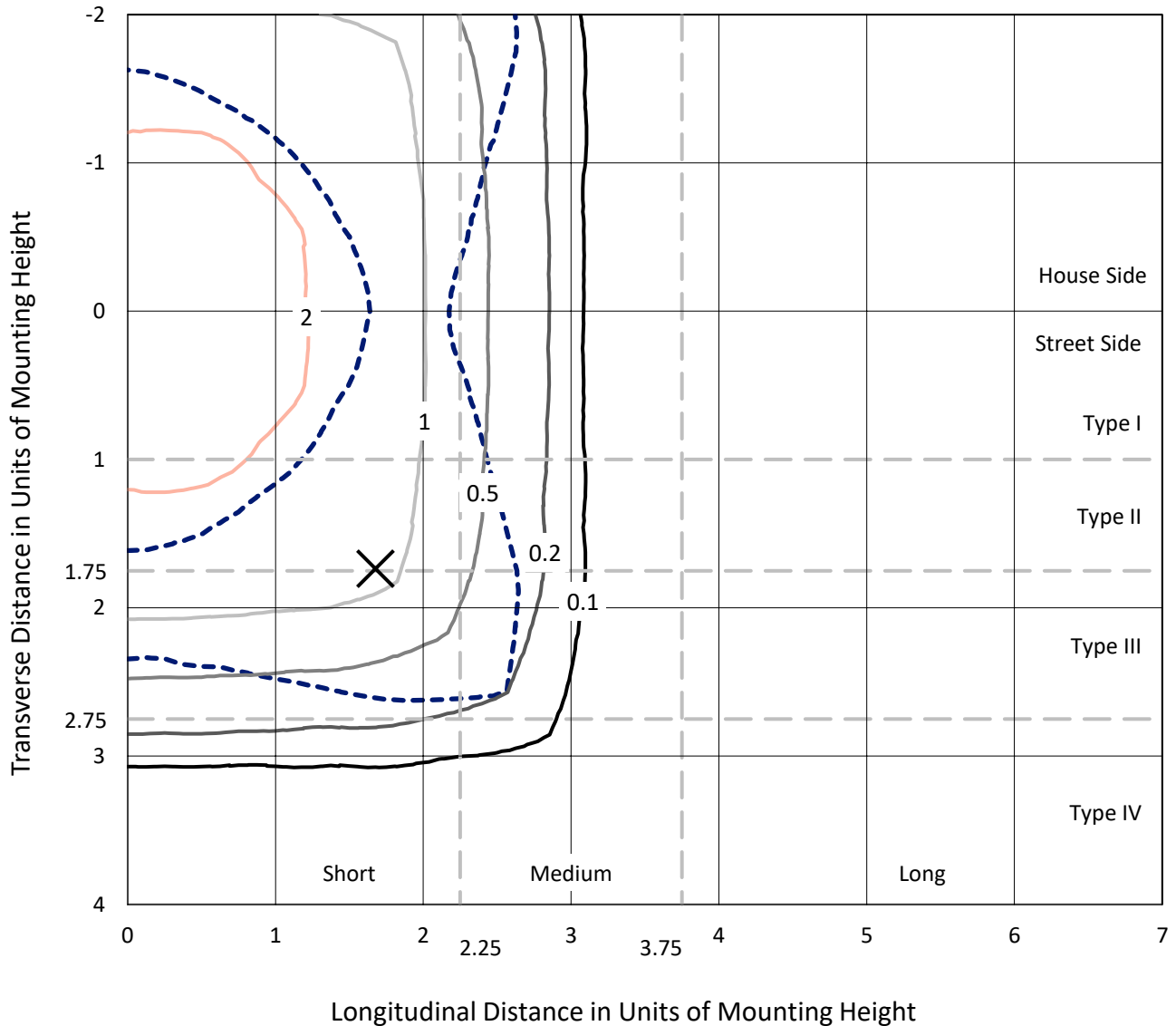
Lumens per Lamp: N/A  
Luminaire Lumens: 34820.1 lumens  
Efficiency: N/A  
Efficacy: 114.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G4

Input Watts (W): 303.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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### Iso-Footcandle Lines of Horizontal Illumination

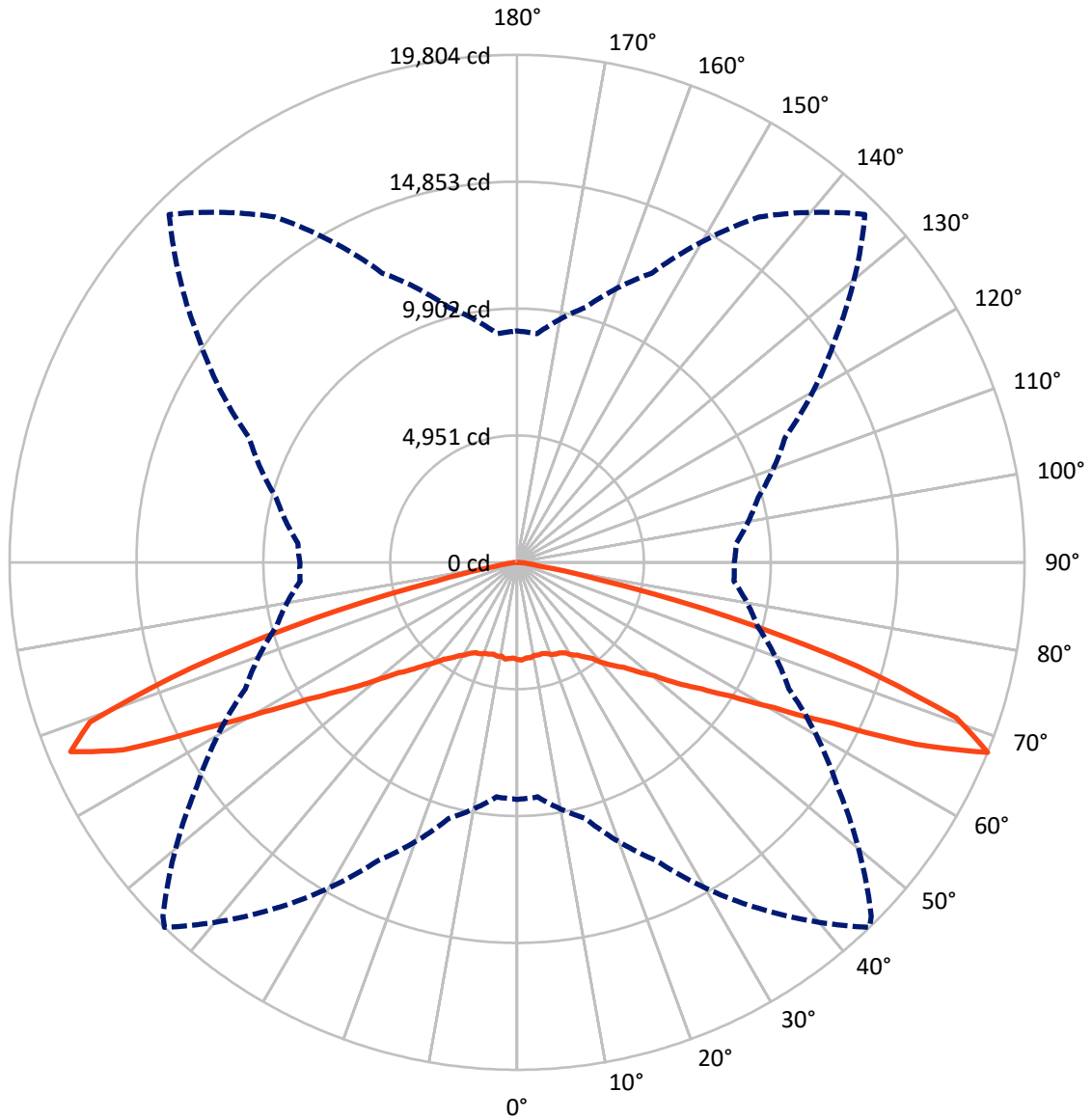
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.2 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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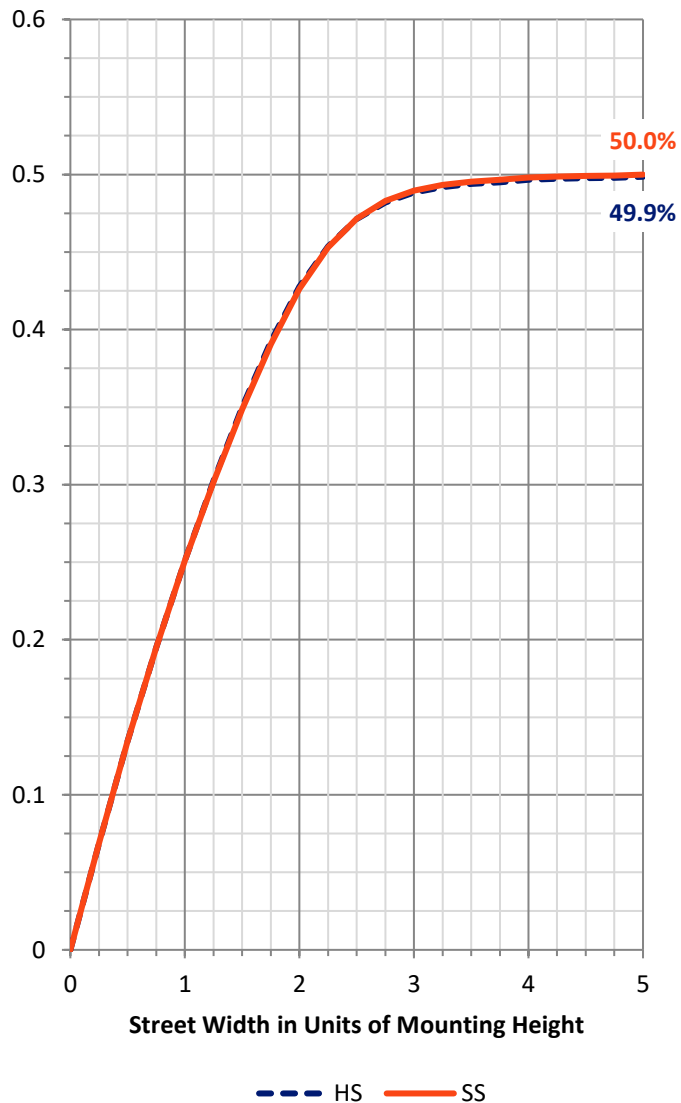
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	17365.5	0.0	17365.5
	% Fixture	49.9	0.0	49.9
<b>Street Side</b>	Lumens	17454.6	0.0	17454.6
	% Fixture	50.1	0.0	50.1
<b>Total</b>	Lumens	34820.1	0.0	34820.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	359.9	1.0
10°-20°	1051.5	3.0
20°-30°	1788.1	5.1
30°-40°	2835.2	8.1
40°-50°	4623.0	13.3
50°-60°	7895.5	22.7
60°-70°	12008.9	34.5
70°-80°	4047.8	11.6
80°-90°	210.2	0.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	34820.1	100.0
0°-180°	34820.1	100.0

**Coefficient of Utilization**



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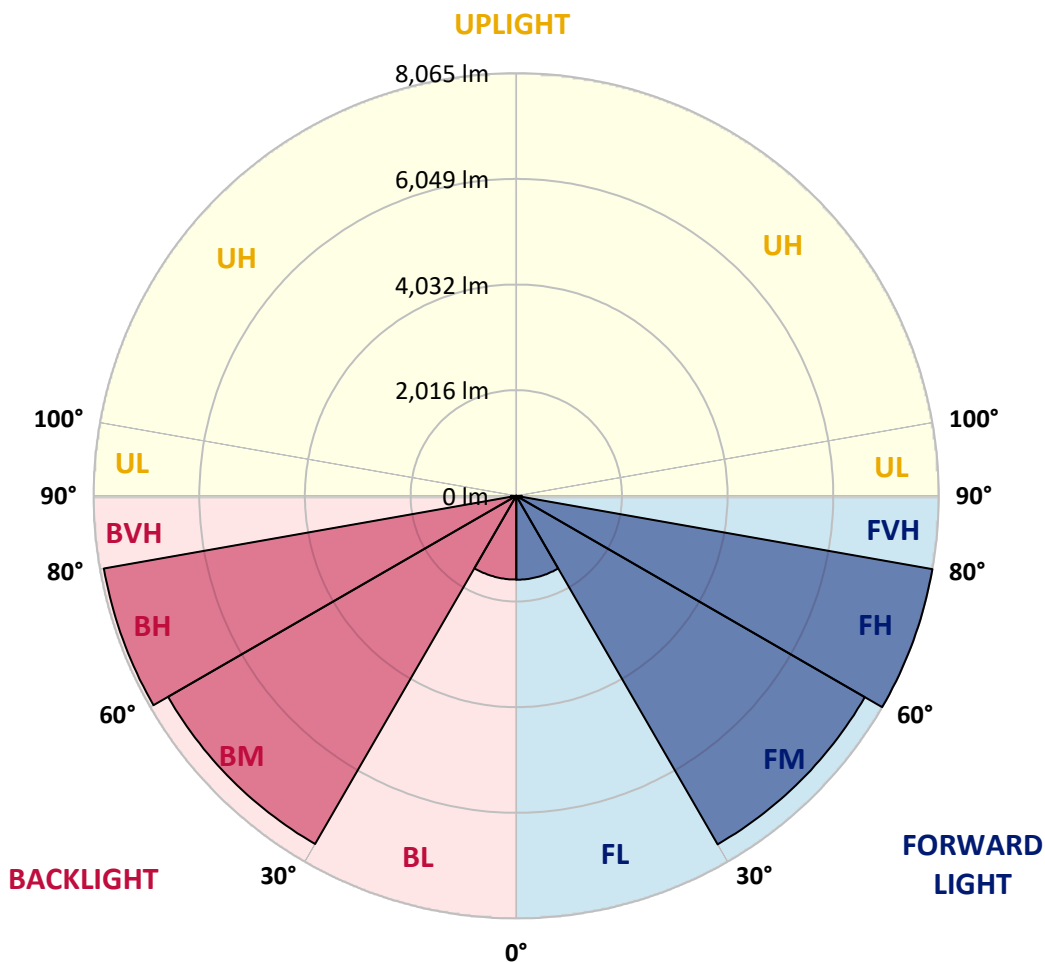
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1601.4	4.6			
FM (30°-60°)	7681.0	22.1			
FH (60°-80°)	8064.7	23.2			G4/12000
FVH (80°-90°)	107.5	0.3			G2/225
BL (0°-30°)	1598.1	4.6	B3/2500		
BM (30°-60°)	7672.7	22.0	B4/8500		
BH (60°-80°)	7992.0	23.0	B5		G4/12000
BVH (80°-90°)	102.7	0.3			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G4**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°
0°	3803.5	3803.5	3803.5	3803.5	3803.5	3803.5	3803.5	3803.5	3803.5	3803.5
2.5°	3716.1	3759.8	3791.6	3787.6	3799.5	3811.4	3795.5	3819.4	3803.5	3831.3
5°	3787.6	3775.7	3779.6	3755.8	3811.4	3747.9	3747.9	3779.6	3819.4	3771.7
7.5°	3743.9	3735.9	3716.1	3751.8	3763.7	3763.7	3795.5	3735.9	3803.5	3819.4
10°	3696.2	3652.5	3712.1	3747.9	3755.8	3692.2	3720.0	3735.9	3716.1	3735.9
12.5°	3656.4	3680.3	3680.3	3680.3	3668.4	3712.1	3739.9	3735.9	3696.2	3732.0
15°	3652.5	3640.5	3676.3	3708.1	3688.2	3696.2	3708.1	3743.9	3668.4	3684.3
17.5°	3648.5	3664.4	3676.3	3672.3	3739.9	3739.9	3728.0	3704.1	3763.7	3732.0
20°	3664.4	3652.5	3684.3	3696.2	3743.9	3839.3	3803.5	3783.6	3751.8	3712.1
22.5°	3684.3	3676.3	3720.0	3771.7	3863.1	3887.0	3883.0	3859.1	3803.5	3755.8
25°	3755.8	3684.3	3732.0	3831.3	3863.1	3910.8	3942.6	3910.8	3835.3	3847.2
27.5°	3863.1	3851.2	3914.8	3982.3	3954.5	3998.2	3970.4	3994.3	3998.2	3938.6
30°	3990.3	3954.5	3994.3	4125.4	4137.3	4185.0	4137.3	4073.8	4093.6	4042.0
32.5°	4173.1	4161.2	4236.7	4324.1	4340.0	4316.2	4292.3	4328.1	4244.7	4204.9
35°	4292.3	4344.0	4435.4	4503.0	4554.7	4530.8	4542.7	4507.0	4526.8	4443.4
37.5°	4646.1	4626.2	4646.1	4761.3	4773.2	4761.3	4773.2	4813.0	4785.2	4713.6
40°	4979.9	4948.1	4995.8	5127.0	5119.0	5158.8	5079.3	5123.0	5123.0	4987.9
42.5°	5230.3	5337.6	5393.2	5500.6	5540.3	5504.5	5488.6	5496.6	5584.0	5425.0
45°	5747.0	5743.0	5909.9	5969.5	5858.3	5850.3	5818.5	5913.9	5973.5	5882.1
47.5°	6307.4	6335.2	6430.6	6454.4	6522.0	6398.8	6398.8	6410.7	6621.3	6406.7
50°	6812.1	6847.9	7038.6	7225.4	7098.3	6967.1	7018.8	7082.4	7197.6	6994.9
52.5°	7424.2	7618.9	7746.1	7845.4	7936.9	7845.4	7726.2	7797.8	8024.3	7754.0
55°	8306.5	8461.5	8580.7	8763.5	8839.0	8715.8	8703.9	8696.0	8823.1	8537.0
57.5°	9292.1	9228.5	9419.3	9701.5	9975.7	9856.5	9820.7	9828.7	9860.5	9455.1
60°	10516.2	10587.8	10814.3	11060.7	11350.9	11517.8	11283.3	11148.2	11176.0	10623.5
62.5°	11215.7	11374.7	11887.4	12734.0	13318.2	13838.8	13874.6	12996.3	12408.1	11335.0
65°	10877.9	10854.1	11819.8	13385.8	15599.5	17113.7	16887.2	14756.9	12702.2	10997.1
67.5°	9252.4	9188.8	10357.3	12841.3	16497.7	19804.4	19546.1	15253.7	11708.6	9729.3
70°	5961.6	5945.7	7213.5	9788.9	14729.1	18182.8	18278.2	13854.7	9530.6	7126.1
72.5°	2166.0	2297.2	3032.5	5262.1	10003.5	13910.4	13970.0	10257.9	5480.7	3294.8
75°	798.9	822.7	957.8	1709.0	4558.6	8541.0	8763.5	4975.9	1947.5	1073.1
77.5°	461.0	465.0	512.7	635.9	1351.3	3334.5	3469.6	1510.3	755.1	572.3
80°	314.0	310.0	361.7	413.3	540.5	945.9	1005.5	631.9	476.9	397.4
82.5°	182.8	194.7	266.3	294.1	329.9	417.3	425.3	393.5	357.7	294.1
85°	111.3	91.4	147.1	163.0	190.8	186.8	186.8	214.6	230.5	206.7
87.5°	27.8	27.8	35.8	39.7	51.7	39.7	43.7	83.5	111.3	103.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

85°		90°	95°	105°	115°	125°	135°	145°	155°	165°	175°
3803.5	0°	3803.5	3803.5	3803.5	3803.5	3803.5	3803.5	3803.5	3803.5	3803.5	3803.5
3847.2	2.5°	3811.4	3799.5	3807.5	3851.2	3823.4	3739.9	3759.8	3803.5	3767.7	3747.9
3799.5	5°	3795.5	3819.4	3791.6	3799.5	3827.3	3759.8	3771.7	3827.3	3803.5	3811.4
3823.4	7.5°	3799.5	3811.4	3787.6	3751.8	3751.8	3807.5	3775.7	3783.6	3747.9	3807.5
3747.9	10°	3775.7	3743.9	3716.1	3735.9	3728.0	3712.1	3700.2	3724.0	3688.2	3739.9
3668.4	12.5°	3704.1	3712.1	3704.1	3696.2	3712.1	3751.8	3688.2	3696.2	3640.5	3648.5
3684.3	15°	3676.3	3700.2	3692.2	3735.9	3755.8	3696.2	3743.9	3696.2	3652.5	3628.6
3688.2	17.5°	3688.2	3724.0	3712.1	3743.9	3708.1	3751.8	3759.8	3739.9	3688.2	3668.4
3712.1	20°	3700.2	3688.2	3704.1	3759.8	3811.4	3767.7	3767.7	3755.8	3708.1	3680.3
3747.9	22.5°	3728.0	3708.1	3732.0	3775.7	3791.6	3859.1	3799.5	3771.7	3692.2	3620.7
3775.7	25°	3783.6	3795.5	3811.4	3795.5	3883.0	3875.0	3867.1	3847.2	3724.0	3728.0
3867.1	27.5°	3890.9	3823.4	3843.2	3938.6	3950.5	3982.3	3942.6	3978.4	3847.2	3851.2
4006.2	30°	4022.1	3950.5	4014.1	4097.6	4093.6	4153.2	4133.4	4141.3	4049.9	3998.2
4141.3	32.5°	4165.2	4157.2	4197.0	4248.6	4268.5	4300.3	4296.3	4296.3	4240.7	4105.5
4415.5	35°	4324.1	4379.8	4427.5	4483.1	4491.1	4530.8	4475.2	4483.1	4427.5	4328.1
4642.1	37.5°	4638.1	4634.1	4685.8	4753.4	4761.3	4729.5	4773.2	4753.4	4677.9	4610.3
4960.0	40°	5003.8	4924.3	4972.0	5130.9	5142.9	5087.2	5083.2	5079.3	5023.6	4876.6
5365.4	42.5°	5321.7	5425.0	5417.1	5468.8	5433.0	5405.2	5504.5	5448.9	5405.2	5250.2
5858.3	45°	5731.1	5762.9	5866.2	6033.1	5862.2	5862.2	5929.8	5886.1	5862.2	5747.0
6295.4	47.5°	6239.8	6267.6	6474.3	6486.2	6374.9	6299.4	6510.1	6518.0	6418.6	6331.2
6899.5	50°	6836.0	6847.9	7034.7	7225.4	7102.2	6959.2	7173.8	7257.2	7034.7	6915.4
7634.8	52.5°	7491.7	7456.0	7611.0	7968.7	7849.4	7805.7	8036.2	8056.1	7754.0	7567.2
8374.0	55°	8246.9	8199.2	8620.5	8862.9	8787.4	8707.9	8811.2	8858.9	8616.5	8310.5
9331.9	57.5°	9224.6	9248.4	9459.1	9697.5	9820.7	9840.6	9888.3	9840.6	9594.2	9284.2
10432.8	60°	10202.3	10273.8	10683.2	11132.3	11172.0	11521.8	11458.2	11219.7	10870.0	10428.8
10524.2	62.5°	10563.9	10504.3	11164.1	12261.0	13195.0	13834.9	13552.7	12706.1	11895.4	11092.5
9908.2	65°	9836.6	9983.7	10881.9	12598.8	14625.8	17157.4	15655.1	13314.2	11676.8	10639.4
8497.2	67.5°	8477.4	8588.7	9729.3	11541.6	15138.5	19200.3	16450.0	12455.7	10297.6	8954.3
5905.9	70°	5905.9	5961.6	7078.4	9455.1	13727.5	18119.3	14840.4	9566.4	7110.2	5667.5
2428.4	72.5°	2376.7	2511.8	3247.1	5695.3	10134.7	13767.3	9991.6	5019.7	2949.0	2193.9
874.4	75°	878.3	882.3	1037.3	1959.4	4813.0	8652.3	4507.0	1613.6	941.9	771.0
528.6	77.5°	508.7	504.7	540.5	707.4	1395.0	3378.2	1279.8	631.9	512.7	461.0
333.8	80°	318.0	314.0	369.6	469.0	612.1	926.0	540.5	393.5	345.8	298.1
218.6	82.5°	202.7	206.7	290.1	345.8	373.6	409.4	314.0	278.2	258.3	170.9
123.2	85°	131.2	119.2	202.7	230.5	206.7	182.8	174.9	147.1	135.1	83.5
63.6	87.5°	59.6	63.6	103.3	115.3	75.5	43.7	43.7	31.8	31.8	19.9
0.0	90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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180°  
3803.5  
3743.9  
3767.7  
3728.0  
3684.3  
3676.3  
3672.3  
3688.2  
3680.3  
3688.2  
3716.1  
3771.7  
3890.9  
4125.4  
4359.9  
4558.6  
4844.8  
5222.4  
5639.7  
6200.1  
6752.5  
7611.0  
8417.8  
9184.8  
10448.7  
11152.1  
10524.2  
**9025.8**  
5747.0  
1991.2  
735.3  
441.2  
298.1  
166.9  
91.4  
19.9  
0.0

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